

POWDERY MILDEW OF MANGO

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The mango, *Mangifera indica* L., is grown in parts of Africa, Asia, and Australia as well as in North, Central, and South America (3). It has been cultivated in India for at least 4000 years (3). Powdery mildew, *Oidium mangifera* Berthet, causes high losses in mango nurseries and orchards. It occurs in many African countries south of the Sahara, in the Middle East, in southern Asia, and in the Americas from the southern United States to Peru and Brazil (1). It also has been reported from New South Wales (1). Ruehle (2) first observed powdery mildew of mango in Florida around 1939.

SYMPTOMS. Mango is the only known host for this species of powdery mildew. All young tissues of the inflorescences, leaves, and fruit are subject to attack by this fungus. Small isolated white, powdery appearing patches of fungus mycelium form on affected plant parts. They eventually coalesce to cover infected areas with a whitish, velvetv powder. Affected tissue finally becomes necrotic and dies (1).

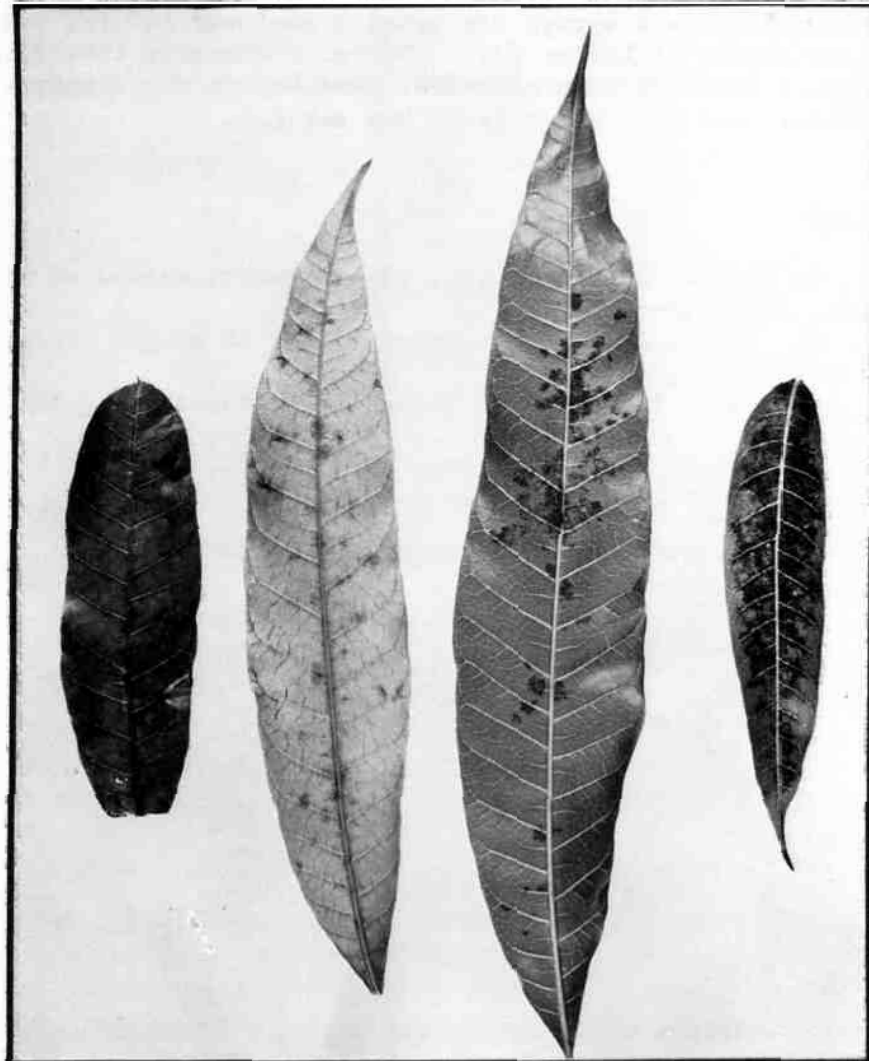


Fig. 1. Powdery mildew on mango, showing symptoms on the undersurface (2 leaves on left) and the uppersurface (2 leaves on right).

Flowers: The sepals are more susceptible than the petals. With infection of the flower stalks and flowers, the flowers usually cease to grow, fail to open, and shed; however, they sometimes persist and set fruit (1).

Branches and center of inflorescences: In highly susceptible varieties, all the branches of the inflorescence may be completely covered with mildew and eventually blacken. On less susceptible varieties, only portions of the branches are affected; the center stalk is not severely affected at its base, but the upper part of the stalk is more often mildewed (1).

Leaves: Young leaves are attacked more frequently on the undersurface but in some varieties both sides of the leaf are attacked, or the upperside may even be affected more severely. Mildew on the undersurface is frequently restricted to the area of the central rib (fig. 1). Affected leaves are curled and distorted (1).

Fruits: Newly set fruit may be covered entirely with mildew. As the fruit grows, the affected epidermis cracks and corky tissue is formed. The fruit usually drops when it has reached pea-size (1).

CONTROL. Sulfur dusts and sprays are usually employed for the control of the mildew, and are highly effective (1). Sulfur treatments should be applied 4 times: when flower clusters have expanded, just before the clusters open, when petals have fallen, and just after fruit has set (1).

Literature Cited

1. Palti, J., Y. Pinkas, and M. Chorin. 1974. Powdery mildew of mango. Plant Dis. Repr. 58(1):45-59.
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3. Singh, L. B. 1960. The mango. Interscience Publishers, Inc., New York. 438 p.